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Rago

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(54) **SELF-DESCRIBING FILE SYSTEM**(75) Inventor: **Stephen A. Rago**, Berkely Heights, NJ (US)(73) Assignee: **EMC Corporation**, Hopkinton, MA (US)

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(51) **Int. Cl.****G06F 17/30** (2006.01)(52) **U.S. Cl.** 707/101; 707/10; 707/205(58) **Field of Classification Search** 707/1, 707/10, 204

See application file for complete search history.

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The invention provides a way for computer applications to parse the operating system's file system format without embedding direct knowledge of the format in the applications themselves. By making a file system self-describing, applications running locally on the same computer, or remotely on another computer, can interpret file system data structures if they can access the disk containing the file system. Storage Area Networks (SANs) present a paradigm where multiple computer systems can see the same set of disk resources. This, combined with the invention of self-describing file systems, makes it possible to build applications that are more intelligent and perform better than their counterparts that either embed knowledge of a file system or rely on a file system driver to interpret the structure on behalf of the applications.

27 Claims, 8 Drawing Sheets